#### **Demonstration**

To run the application, save the code as a Python file (e.g., analyze\_csv.py) and then run it from the command line. For example, if you save the code as analyze\_csv.py, you can run it by typing the following command into the command line:

python analyze\_csv.py

This will prompt you to enter the path to a CSV file. Once you have entered the path, the application will analyze the file, generate plots, and print the analysis results to the console. You can also open the generated plots by clicking on the links that are printed to the console.

## Report

## Design

The application is designed to be a simple and easy-to-use tool for performing statistical analysis of CSV files. The application takes a CSV file as input and performs basic statistical analysis, including calculating the mean, median, mode, standard deviation, and correlation coefficients. The application also generates plots of the data, including histograms, scatter plots, and line plots.

# **Implementation**

The application is implemented in Python using the pandas and matplotlib libraries. The pandas library is used to read the CSV file into a DataFrame and perform the statistical analysis. The matplotlib library is used to generate the plots.

#### Conclusion

The application is a useful tool for performing statistical analysis of CSV files. The application is easy to use and generates informative results.